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Notice of Allowability

Application No.

09/496,069

Examiner

Kenneth Tang

Applicant(s)

YOSHIMURA ET AL.

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/30/05.
2. ☒ The allowed claim(s) is/are 1, 3-8; now renumbered as 1-7.
3. ☒ The drawings filed on 01 February 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/1/05.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


MENG-AL T. AN
ASSISTANT PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Joseph Fox (Reg. 41,760) on 8/1/05.

3. Pursuant to MPEP 606.01, the title has been changed to read: -- SYSTEM DIAGNOSES OF RESOURCE PERFORMANCE WITH UPGRADE RECOMMENDATION INFORMATION BASED ON QUEUE NUMBER AND UTILITY RATE --.

4. The claims had been amended as follows:

In the Claims:

Please amend claims 1 and 7-8 as follows:

1. (Currently amended) A system diagnosis apparatus that diagnoses system resources of a computer system, comprising:

an acquisition unit which acquires information on a utility rate of each system resource and a plurality of queues associated with the system resources, said queues each having a queue number being the number of programs, processes or demands waiting to be processed in each queue;

a memory unit that stores both a threshold of the utility rate and a threshold

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of the queue number for each system resource, wherein the thresholds represent the limits at which said system resources perform desired performances; and

a diagnosis unit that:

diagnoses that the performance of a selected system resource has lowered when the utility rate is higher than the threshold of the utility rate and the queue number is less than the threshold of the queue number, wherein the diagnosis unit transmits, to the computer system, information including upgrade recommendation information for replacing said selected system resource that is diagnosed to have low performance with an upgraded system resource; and

diagnoses that the number of the system resources is insufficient for said selected system resource when the utility rate is higher than the threshold of the utility rate and the queue number is greater than the threshold of the queue number, wherein the diagnosis unit transmits, to the computer system, information including upgrade recommendation information for adding to said selected system resource that is diagnosed to have low performance with an additional system resource;

a system resource determining unit which determines a system resource capable of giving the desired performance when it is diagnosed by said diagnosis unit that the performance of the system resource has lowered, or determines a number of the system resources capable of giving the desired performance when it is diagnosed by said system diagnosis unit that the number of the system resources is insufficient; and

an ordering unit which orders the system resource determined by said

system resource determining unit as the system resource for upgrading.

2. (Cancelled)

3. (Original) The system diagnosis apparatus according to claim 1, wherein said ordering unit transmits, utilizing a network, the ordering information on the system resources to a device installed at the supplier of the system resources.

4. (Original) The system diagnosis apparatus according to claim 1, further comprising a notifying unit which notifies, utilizing a network, the result of diagnosis by said diagnosis unit to the user of the system.

5. (Previously presented) A system diagnosis apparatus according to claim 1, wherein

said memory unit stores in correlation to each of said system resource a flag indicating a necessity or not of an upgrade, which necessity is judged by a user, and

said ordering unit orders only the system resources that have a flag indicating the necessity of the upgrade of the system resources as determined by said system resource determining unit.

6. (Previously presented) The system diagnosis apparatus according to

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claim 1, wherein

said acquisition unit acquires information on a response time of the system resources in addition to the utility rate and the queue number,

said memory unit stores a threshold of the response time, which threshold represents the limit at which said system resource exhibits a desired performance, in addition to the thresholds of the utility rate and the queue number, and

said diagnosis unit makes the diagnosis on the basis of the result of comparison between the acquired response time and the threshold of the response time.

7. (Currently Amended) A system diagnosis method for diagnosing system resources of a computer system, comprising the steps of:

acquiring information on a utility rate of each system resource and a plurality of queues associated with the system resources, said queues each having a queue number being the number of programs, processes or demands waiting to be processed in each queue;

storing both a threshold of the utility rate and a threshold of the queue number for each system resource, wherein the thresholds represent the limits at which said system resources perform desired performances;

diagnosing that the performance of a selected system resource has lowered when the utility rate is higher than the threshold of the utility rate and the queue number is less than the threshold of the queue number, and transmitting, to the computer system,

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information including upgrade recommendation information for replacing said selected system resource that is diagnosed to have low performance;~~and~~

diagnosing that the number of the system resources is insufficient for said selected system resource when the utility rate is higher than the threshold of the utility rate and the queue number is greater than the threshold of the queue number and transmitting, to the computer system, information including upgrade recommendation information for adding to said selected system resource that is diagnosed to have low performance;

determining a system resource capable of giving the desired performance when it is diagnosed that the performance of the system resource has lowered, or determining a number of the system resources capable of giving the desired performance when it is diagnosed that the number of the system resources is insufficient; and

ordering the determined system resource as the system resource for upgrading.

8. (Currently Amended) A computer-readable recording medium recording a system diagnosis program for diagnosing system resources of a computer system, for causing the computer to execute the steps of:

acquiring information on a utility rate of each system resource and a plurality of queues associated with the system resources, said queues each having a queue number being the number of programs, processes or demands waiting to be processed in

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each queue;

storing both a threshold of the utility rate and a threshold of the queue number for each system resource, wherein the thresholds represent the limits at which said system resources perform desired performances;

diagnosing that the performance of a selected system resource has lowered when the utility rate is higher than the threshold of the utility rate and the queue number is less than the threshold of the queue number and transmitting, to the computer system, information including upgrade recommendation information for replacing said selected system resource that is diagnosed to have low performance;~~and~~

diagnosing that the number of the system resources is insufficient for said selected system resource when the utility rate is higher than the threshold of the utility rate and the queue number is greater than the threshold of the queue number and transmitting, to the computer system, information including upgrade recommendation information for adding to said selected system resource that is diagnosed to have low performance;

determining a system resource capable of giving the desired performance when it is diagnosed that the performance of the system resource has lowered, or determining a number of the system resources capable of giving the desired performance when it is diagnosed that the number of the system resources is insufficient; and

ordering the determined system resource as the system resource for upgrading.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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8/1/05


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